

IN THE CLAIMS:

What is claimed is:

1. (Currently amended) A computer-implemented character validation method comprising the steps of:

retrieving a data value from a character stream;
determining a validity of a character represented by said data value in response to a member of a data structure, said member corresponding having a direct correspondence to said data value, wherein said validity is determined in response to a logical combination of status values in said member of said data structure.

2. (Currently amended) The computer-implemented method of claim 1 further comprising the step of indexing into said data structure using said data value, wherein said member of said data structure corresponding to said data value is pointed to in response to said indexing step.

3. (Currently amended) The computer-implemented method of claim 2 wherein said data structure comprises an array.

4. (Currently amended) The computer-implemented method of claim 1 wherein, if the logical combination corresponds to a logically “TRUE” value, said data value represents a valid character.

5. (Currently amended) The computer-implemented method of claim 1 further comprising the step of, if each character in said character stream is valid, applying a predetermined set of syntactic rules to byte patterns comprising said character stream.

6. (Currently amended) The computer-implemented method of claim 1 further comprising the step of generating said data structure.

7. (Currently amended) The computer-implemented method of claim 5 wherein said character stream comprises characters in accordance with a specification for an extensible

markup language, and wherein said status values are set in accordance with a set of valid characters defined in said specification.

8. (Currently amended) The computer-implemented method of claim 7 wherein the extensible markup language comprises XML and wherein said syntactic rules include rules in accordance with XML.

9. (Currently amended) A data processing system comprising:
first circuitry operable for retrieving a data value from a character stream;
second circuitry operable for determining a validity of a character represented by said data
value in response to a member of a data structure, said member having a direct correspondence
~~corresponding~~ to said data value, wherein said validity is determined in response to a logical
combination of status values in said member of said data structure.

10. (Currently amended) The system of claim 9 further comprising circuitry operable for
indexing into said data structure using said data value, wherein said member of said data
structure corresponding to said data value is pointed to as part of the operation of said second
circuitry. ~~in response to said indexing step.~~

11. (Original) The system of claim 10 wherein said data structure comprises an array.

12. (Original) The system of claim 9 wherein, if said logical combination corresponds to a
logically "TRUE" value, said data value represents a valid character.

13. (Currently amended) The system of claim 9 further comprising third circuitry operable
for, if each character in said character stream is valid, applying a predetermined set of syntactic
rules to byte patterns comprising said character stream.

14. (Currently amended) The system of claim 9 further comprising fourth circuitry operable
for generating said data structure.

15. (Original) The system of claim 13 wherein said character stream comprises characters in accordance with a specification for an extensible markup language, and wherein said status values are set in accordance with a set of valid characters defined in said specification.

16. (Original) The system of claim 15 wherein the extensible markup language comprises XML and wherein said syntactic rules include rules in accordance XML.

17. (Currently amended) A computer program product embodied in a machine-readable storage medium including programming for validation, the programming comprising a set of instructions for performing the steps of:

retrieving a data value from a character stream;
determining a validity of a character represented by said data value in response to a member of a data structure, said member having a direct correspondence ~~corresponding~~ to said data value, wherein said validity is determined in response to a logical combination of status values in said member of said data structure.

18. (Currently amended) The program product of claim 17 further comprising instructions for performing the step of indexing into said data structure using said data value, wherein said member of said data structure corresponding to said data value is pointed to in response to said indexing step.

19. (Original) The program product of claim 18 wherein said data structure comprises an array.

20. (Original) The program product of claim 17 wherein, if the logical combination corresponds to a logically "TRUE" value, said data value represents a valid character.

21. (Original) The program product of claim 17 further comprising instructions for performing the step of, if each character in said stream is valid, applying a predetermined set of syntatic rules to byte patterns comprising said character stream.

22. (Original) The program product of claim 17 further comprising the step of generating said data structure.
23. (Original) The program product of claim 21 wherein said character stream comprises characters in accordance with a specification for an extensible markup language, and wherein said status values are set in accordance with a set of valid characters defined in said specification.
24. (Original) The program product of claim 23 wherein the extensible markup language comprises XML and wherein said syntactic rules include rules in accordance with XML.
25. (Currently amended) A character validation method comprising the steps of:
retrieving a data value from a character stream;
determining a validity of a character represented by said data value in response to a member of a data structure, said member having a direct correspondence ~~corresponding~~ to said data value, wherein said validity is determined in response to a logical combination of status values in said member of said data structure, wherein said character stream comprises characters in accordance with a specification for an extensible markup language, and wherein said status values are set in accordance with a set of valid characters defined in said specification; and
if each character in said stream is valid, applying a predetermined set of syntactic rules to byte patterns comprising said character stream in accordance with said extensible markup language.
26. (Original) The method of claim 25 wherein said character stream comprises a message packaged in accordance with a predetermined information exchange protocol.